ABSTRACT OF THE DISCLOSURE

A system monitoring unit uses an external debugging unit to monitor the state of an internal CPU when a control program stored in a memory of a target system controls an internal CPU of the system to operate via an internal bus of the system. The system monitoring unit includes an internal-bus-address comparing circuit for detecting, in real time, based on information on the internal bus, information on the accessing of the internal bus by the internal CPU. By outputting the information on the accessing of the internal bus by the internal CPU to the debugging unit, the system monitoring unit can output the state of the internal bus while controlling the internal CPU to operate.